Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) An image processing apparatus, comprising:

a coding part partitioning a wavelet coefficient obtained by performing two-dimensional discrete wavelet transform on image data into bit-planes and generating coded data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes;

a first memory accommodating a size of a coded data portion generated from the wavelet coefficient for each of the bit-planes through the execution of the entropy coding;

a second memory accommodating the coded data of the image data;

a setting part setting a target size of the coded data; and

a data size adjustment part adjusting the size of the coded data such that the size of the coded data falls within an acceptable range, which includes ~~including~~ the target size set by the setting part, by sequentially discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each of the bit-planes in the first memory.

2. (original) The image processing apparatus as claimed in claim 1, wherein the image processing apparatus is based on JPEG2000.

3. (original) The image processing apparatus as claimed in claim 2, wherein

the coding part partitions the wavelet coefficient into bit-planes for each code-block formed of a predetermined pixel matrix and generates the coded data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes in accordance with the JPEG2000;

the first memory accommodates a storage address of a coded data portion corresponding to each code-block and a size of a coded data portion corresponding to each coding pass for each of the bit-planes of each code-block with respect to the coded data stored in the second memory; and

the data size adjustment part adjusts the size of the coded data such that the size of the coded data falls within an acceptable range including the target size of the coded data set by the setting part by subsequently discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each coding pass stored in the first memory.

4. (currently amended) An image processing method, comprising:

a coding step of partitioning a wavelet coefficient obtained by performing two-dimensional discrete wavelet transform on image data into bit-planes and generating coded data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes;

a first storage step of accommodating a size of a coded data portion generated from the wavelet coefficient for each of the bit-planes through the execution of the entropy coding in a first memory;

a second storage step of accommodating the coded data of the image data in a second memory;

a setting step of setting a target size of the coded data; and

a data size adjustment step of adjusting the size of the coded data such that the size of the coded data falls within an acceptable range, which includes ~~including~~ the target size set by the setting step, by sequentially discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each of the bit-planes in the first memory.

5. (original) The image processing method as claimed in claim 4, wherein the image processing method is based on a JPEG2000.

6. (original) The image processing method as claimed in claim 5, wherein

the coding step partitions the wavelet coefficient into bit-planes for each code-block formed of a predetermined pixel matrix and generates the coded data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes in accordance with the JPEG2000;

the first storage step accommodates a storage address of a coded data portion corresponding to each code-block and a size of a coded data portion corresponding to each coding pass for each of the bit-planes of each code-block with respect to the coded data stored in the second memory; and

the data size adjustment step adjusts the size of the coded data such that the size of the

coded data falls within an acceptable range including the target size of the coded data set by the setting step by subsequently discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each coding pass stored in the first memory.

7. (previously presented) The image processing apparatus of claim 1, wherein said coded data is data generated by performing entropy encoding, and a portion of the entropy-coded data.

8. (previously presented) The image processing apparatus of claim 1, wherein the size of the coded data is adjusted to fall within the acceptable range, without repeatedly performing entropy encoding.

9. (new) The image processing apparatus as claimed in claim 1, wherein the size of the coded data is adjusted by said data size adjusting part to fall within the acceptable range, without repetition of coding, after generation of said coded data by said coding part.

10. (new) An image processing apparatus comprising:

coding means for partitioning a wavelet coefficient obtained by performing two-dimensional discrete wavelet transform on image data into bit-planes and generating coded data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes;

first storage means for accommodating a size of a coded data portion generated from the wavelet coefficient for each of the bit-planes through the execution of the entropy coding;

second storage means for accommodating the coded data of the image data;

setting means for setting a target size of the coded data; and

data size adjustment means for adjusting the size of the coded data such that the adjusted size of the coded data falls within an acceptable range, which includes the target size set by the setting part, by sequentially discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each of the bit-planes in the first memory,

wherein the size of the coded data is adjusted by said data size adjusting means to fall within the acceptable range, without repetition of coding, after generation of said coded data by said coding means.